

Amendments to the Specification:

Please replace paragraph [0001] with the following rewritten paragraph:

[0001] The following co-pending applications:

"SYSTEMS AND METHODS FOR PREDICTING USAGE OF A WEB SITE USING PROXIMAL CUES", by E. Chi et al., ~~Attorney Docket No. DA0A29~~, filed March 30, 2001 as U.S. Application Serial No. 09/820,706, now U.S. Patent No. 6,907,459;

"SYSTEMS AND METHOD FOR INFORMATION BROWSING USING MULTI-MODAL FEATURES", by F. Chen et al., ~~Attorney Docket No. D/99011~~, filed October 19, 1999, as U.S. Application Serial No. 09/421,770, now issued as U.S. Patent No. 6,728,752;

"SYSTEM AND METHOD FOR PROVIDING RECOMMENDATIONS BASED ON MULTI-MODAL USER CLUSTERS", by H. Schuetze et al., ~~Attorney Docket No. D/99197~~, filed October 19, 1999, as U.S. Application Serial No. 09/425,038, now U.S. Patent No. 6,567,797;

"SYSTEM AND METHOD FOR QUANTITATIVELY REPRESENTING DATA OBJECTS IN VECTOR SPACE", by H. Schuetze et al., ~~Attorney Docket No. D/99198~~, filed October 19, 1999, as U.S. Application Serial No. 09/421,416, now U.S. Patent No. 6,922,699;

"SYSTEM AND METHOD FOR IDENTIFYING SIMILARITIES AMONG DOCUMENTS IN A COLLECTION", by H. Schuetze et al., ~~Attorney Docket No. D/99198Q1~~, filed October 19, 1999, as U.S. Application Serial No. ~~09/425,039~~ 09/421,767, now U.S. Patent No. 6,941,321;

"SYSTEM AND METHOD FOR CLUSTERING DATA OBJECTS IN A COLLECTION", Schuetze et al., ~~Attorney Docket No. D/991982~~, filed October 19, 1999, as U.S. Application Serial No. 09/425,039, now issued as U.S. Patent No. 6,598,054;

"SYSTEM AND METHOD FOR VISUALLY REPRESENTING THE CONTENTS OF A MULTIPLE DATA OBJECT CLUSTER", by H. Schuetze et al., ~~Attorney Docket No. D/99198Q3~~, filed October 19, 1999, as U.S. Application Serial No. 09/421,419, now issued as U.S. Patent No. 6,564,202; ~~are each incorporated herein by reference in the entirety.~~

~~"SYSTEM AND METHOD FOR PREDICTING THE USAGE OF A WEB SITE USING PROXIMAL CUES", by Ed. Chi et al., Attorney Docket No. D/A0A29, filed March 30, 2001, as U.S. Application Serial No. 09/820,706;~~

"SYSTEM AND METHOD FOR INFERRING USER INFORMATION NEED IN A HYPERMEDIA LINKED DOCUMENT COLLECTION " by Ed Chi et al., ~~Attorney Docket No. D/99794~~, filed March 31, 2000, as U.S. Application Serial No. ~~09/540063~~09/540,063; are each incorporated herein by reference in ~~the~~their entirety.

Please replace paragraph [0016] with the following rewritten paragraph:

[0016] In step S70, the information need associated with the selected user path is determined. The information need may be determined using co-pending application "SYSTEM AND METHOD FOR INFERRING USER INFORMATION NEED IN A HYPERMEDIA LINKED DOCUMENT COLLECTION " by Ed Chi et al., ~~Attorney Docket No. D/99794~~, filed March 31, 2000, as U.S. Application Serial No. ~~09/540063~~; ~~incorporated herein by reference in its entirety~~. It will be apparent that the information need may be determined using any known or later developed technique of determining user information need. The determination of information need is further discussed with respect to Fig. 3. The determination of information need accepts a user path and indicates the user information need for the path by returning a weighted group of keywords describing the user information need. The weighted group of keywords reflecting the information need is stored as a multi-modal information need feature vector for the user path. Control then continues to step S80.

Please replace paragraph [0024] with the following rewritten paragraph:

[0024] In the exemplary embodiment according to this invention, a choice between K-Means clustering and Wavefront clustering is determined. Multi-Modal Clustering is further discussed in the co-pending related application entitled "SYSTEM AND METHOD FOR IDENTIFYING SIMILARITIES AMONG DOCUMENTS IN A COLLECTION", by H. Schuetze et al., filed October 19, 1999 as U.S. Application Serial No. ~~09/425,039~~09/421,767; and "SYSTEM AND METHOD FOR CLUSTERING DATA OBJECTS IN A

COLLECTION", Schuetze et al., ~~Attorney Docket No. D/991982~~, filed October 19, 1999 as U.S. Application Serial No. 09/425,039, now issued as U.S. Patent No. 6,598,054, ~~incorporated herein by reference in its entirety~~. However, it will be apparent that any type of clustering, such as Hierarchical Clustering, known or later developed may be used according to this invention.

Please replace paragraph [0039] with the following rewritten paragraph:

[0039] In step S350 spreading activation according to the following formulas (1-2) is applied to generate initial document vector A.

$$A(1) = \text{ALPHA} * \text{Topology Matrix} * E \quad (1)$$

$$A(t) = \text{ALPHA} * \text{Topology Matrix} * A(t-1) + E \quad (2)$$

The formula is applied t number of times where the matrix W reflects the weighted content matrix and vector E reflects the user path. The value ALPHA reflects the probability a user will click through to a document or web page and therefore ranges between 0 and 1. Control then continues to step S360.

Please replace paragraph [0047] with the following rewritten paragraph:

[0047] The user path multi-modal information need feature vector determining circuit 24 is then activated. The user path multi-modal information need feature vector determining circuit 24 identifies the information need keywords associated with a user path using the techniques described in co-pending application, "SYSTEM AND METHOD FOR INFERRING USER INFORMATION NEED IN A HYPERMEDIA LINKED DOCUMENT COLLECTION " by Ed Chi et al., ~~Attorney Docket No. D/99794~~, filed March 31, 2000, as U.S. Application Serial No. ~~09/540063~~09/540,063, ~~incorporated herein by reference in its entirety~~. The user path multi-modal information need feature vector determining circuit 24 stores the information need keyword information in memory 14 indicating the most relevant keywords for the user path. In the exemplary embodiment of the system according to this

invention, the value of a given position in the information need keyword vector indicates how relevant the associated keyword is to the user path. For the exemplary vector B having the following six entries, [1 2 5 99 1 50], the vector positions 4 and 6 represent the two most relevant keywords. These vector positions might, for example, represent "chocolate" and "soufflee".

Please replace paragraph [0048] with the following rewritten paragraph:

[0048] The controller circuit 10 then activates the multi-modal content feature vector determining circuit 26 to break each retrieved document or web page of the document collection or web site 95 into constituent words. The words may then be weighted according to any known or later developed technique for weighting. For example, term frequency or inverse document frequency weighting may be used. The content information is then represented in the form of a multi-modal content feature vector as further described in "SYSTEM AND METHOD FOR QUANTITATIVELY REPRESENTING DATA OBJECTS IN VECTOR SPACE", by H. Schuetze et al., ~~Attorney Docket No. D/99198~~, filed October 19, 1999, as U.S. Application Serial No. 09/421,416 ~~incorporated herein by reference in its entirety~~. A multi-modal vector allows different types of information representing the document collection to be combined and operated upon using a unified representation.